ACTEX Learning

EA-2F Exams & Solutions

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An EA Exam

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Enrolled Actuaries Pension Examination, Segment F

EA-2, Segment F

Date: Thursday, November 9, 2023

INSTRUCTIONS TO CANDIDATES

1. Special conditions generally applicable to all questions on this examination are found in a separate .PDF on the computer screen.

2. All questions should be answered in accordance with laws, rules and regulations in effect as of May 31, 2023.

3. This examination consists of 59 multiple-choice questions of varying value. The point value for each question is shown in parentheses at the beginning of each question. Total point value is 160.

4. Your score will be based on the point values for the questions that you answer correctly. No credit will be given for omitted answers and no credit will be lost for wrong answers; hence, you should answer all questions even those for which you have to guess. Answer choices C, D, and E will be considered incorrect answers on True-False questions.

5. Do not spend too much time on any one question. If a question seems too difficult, leave it and go on.

6. While every attempt is made to avoid defective questions, sometimes they do occur. If you believe a question is defective, the supervisor or proctor cannot give you any guidance beyond the instructions on the computer screen.

7. Use the scratch paper booklets provided by Prometric for your scratch work. Extra scratch paper booklets are available if you run out of scratch paper in the booklet provided to you.

Answer Key EA-2F Fall
2023 August 18, 2023

Question	Answer		Question	Answer
1	D		31	A
2	B		32	B
3	C		33	C
4	C		34	B
5	B		35	C
6	D		36	B
7	B		37	B
8	D		38	B
9	B		39	B
10	C		40	B
11	A		41	C
12	C		42	C
13	C		43	C
14	C		44	E
15	B		45	D
16	C		46	C
17	C		47	E
18	C		48	B
19	B		49	E
20	C		50	D
21	B		51	D
22	D		52	A
23	A		53	A
24	B		54	A
25	B		55	C
26	A		56	A
27	B		57	C
28	B		58	D
29	C		59	C
30	C			

Data for Question 1 (2 points)

Valuation date: 1/1/2024

The plan year is a short plan year that runs from 1/1/2024 to 6/30/2024.

Selected information as of 1/1/2024 for the short plan year:

Prefunding balance	$0
Actuarial (market) value of assets	490,000
Funding target	500,000
Target normal cost	35,000

The shortfall amortization charge for 2024 before the change to the short plan year was $5,000.

$X equals the **smallest amount that satisfies the minimum funding standard** as of 1/1/2024 for the short plan year.

Question 1

In what range is ***$X***?

(A) Less than $22,000

(B) $22,000 but less than $27,500

(C) $27,500 but less than $33,000

(D) $33,000 but less than $38,500

(E) $38,500 or more

Data for Question 2 (1 point)

Type of plan: Multiemployer

Consider the following statement regarding the funding standard account credit balance:

The credit balance is adjusted to reflect interest to the end of the plan year using the actual rate of return on plan assets for the plan year.

Question 2

Is the above statement true or false?

(A) True

(B) False

SOLUTIONS TO THE NOVEMBER 2023 EA-2F EXAMINATION

Q1 - Because the funding target exceeds the actuarial value of assets reduced by the value of funding balances, the minimum required contribution equals the target normal cost plus the value of shortfall amortization installments.

The question states that the target normal cost for the short plan year is $35,000.

Regulation 1.430(a)-1(b)(2)(ii) states that amortization installments for a short plan year are calculated as the amount of the installment which would be paid for a full plan year prorated for the fractional year. As such, the short 2024 plan year amortization installment is calculated as follows:

$5,000 x (6-month short plan year / 12 months) = $2,500

The minimum required contribution as of 1/1/2024 for the short plan year is therefore $35,000 + $2,500 = **$37,500**.

ANSWER D

Q2 – Code Section 431(b)(6) states that funding standard account charges and credits (which would include the credit balance) are credited with interest using the rate of interest used to determine plan costs. This rate of interest is not the actual return on plan assets.

The statement is FALSE.

ANSWER B

Q3 – Smith is age 62 with 20 years of service as of 1/1/2024. Smith's accrued benefit as of 1/1/2024 is as follows:

$150 * 12 * 20 years of service = $36,000

First, we calculate the expected accrued liability for Smith which is what the accrued liability would have been if she did not retire; recall that, per Exam Conditions #3 and #4, benefits are assumed to commence at normal retirement age (65) unless otherwise specified:

$$\$36{,}000 * \frac{N_{65}^{(12)}6.00\%}{D_{62}6.00\%}$$

$$= \$36{,}000 * \frac{259{,}082}{26{,}321} = \$354{,}354$$

Next, we calculate the actual accrued liability which reflects Smith's retirement on 12/31/2023 at age 62 with a 5-year certain and life option; Exam Condition #4 instructs us to assume that benefit payments are paid monthly and at the beginning of each month.

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